

- 8 -

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

1. A portable apparatus for conveying blood flow parameters to a user, the apparatus comprising:
 - a transducer device for providing for a Doppler monitoring of flows within a
 - 5 patient;
 - a processing unit interconnected to said transducer unit and adapted to extract a blood flow signal from the operation of said transducer and process said blood flow signal so as to produce a video blood flow signal and an audio blood flow signal;
 - a display unit interconnect to said processing unit for visualising the video blood
 - 10 flow signal; and
 - at least one audio emission device interconnected to said processing unit for emission of and audible form of said audio blood flow signal to the ears of said user.
2. An apparatus as claimed in claim 1 wherein said processing unit and said display unit are packaged as a handheld device.
- 15 3. An apparatus as claimed in any previous claim wherein said processing unit performs audio spatialisation of said audio blood flow signal and the number of audio emission devices is at least two.
4. An apparatus as claimed in claim 3 wherein said audio spatialisation includes a spatial separation of information in accordance with the depth of the received signal
- 20 from a transducer element.
5. An apparatus as claimed in any previous claim further comprising:
 - storage means for storing information associated with subjects on who the device is used.
6. An apparatus as claimed in claim 5 further comprising:

- 9 -

a microphone for use in recording audio commentary by the user for storage in said storage means.

7. A method of transmission of information of blood flow characteristics within a patient, the method comprising the steps of

- 5 (a) providing a Doppler flow signal indicative of blood flows within the body,
(b) visualising the Doppler flow signal on a display device; and
(c) simultaneously providing an audio output to said listener of the Doppler blood flow signal.

8. A method as claimed in claim 5 wherein said step (c) includes providing an
10 apparent spatialisation of said audio output to said listener.